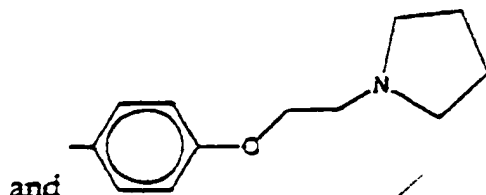
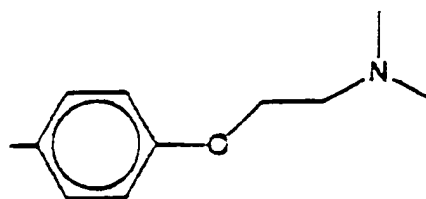
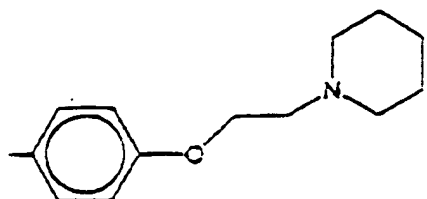


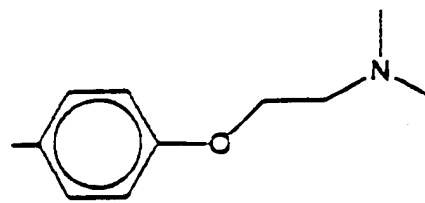
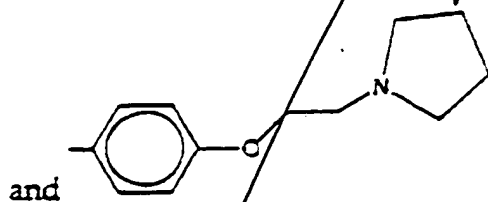
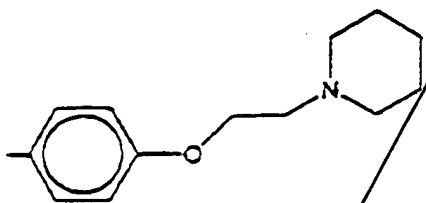
41. The method of Claim 4 wherein the selective estrogen receptor modulator has a molecular formula with the following features:

- (a) two aromatic rings spaced by 1 to 2 intervening carbon atoms, both aromatic rings being either unsubstituted or substituted by a hydroxyl group or a group converted *in vivo* to hydroxyl;
- (b) a side chain possessing an aromatic ring and a tertiary amine function or salt thereof.

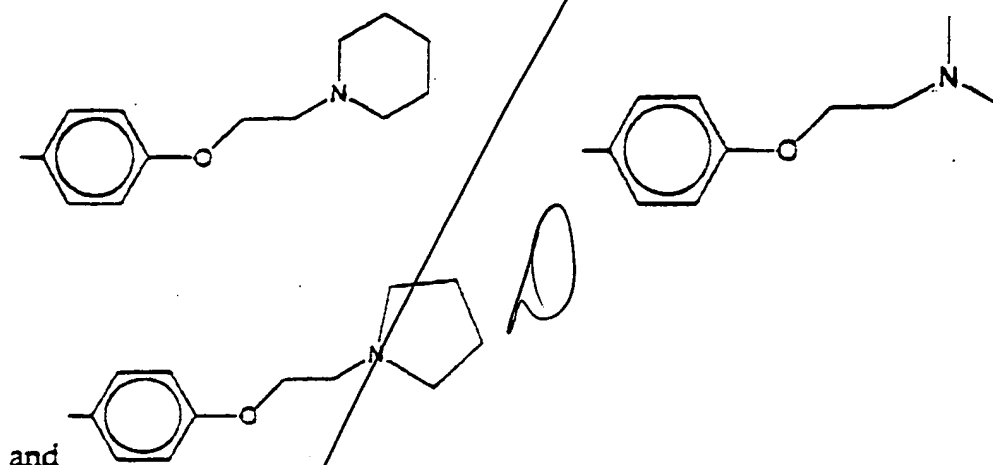
42. The method of Claim 39 wherein the side chain is selected from the group consisting of:



43. The method of Claim 40 wherein the side chain is selected from the group consisting of:



44. The method of Claim 41 wherein the side chain is selected from the group consisting of:



45. The method of Claim 39 wherein the two aromatic rings are both phenyl and wherein the side chain possesses a moiety selected from the group consisting of a methine, a methylene, -CO-, -O-, and -S-, an aromatic ring, and a tertiary amine function or salt thereof.

46. The method of Claim 40 wherein the two aromatic rings are both phenyl and wherein the side chain possesses a moiety selected from the group consisting of a methine, a methylene, -CO-, -O-, and -S-, an aromatic ring, and a tertiary amine function or salt thereof.

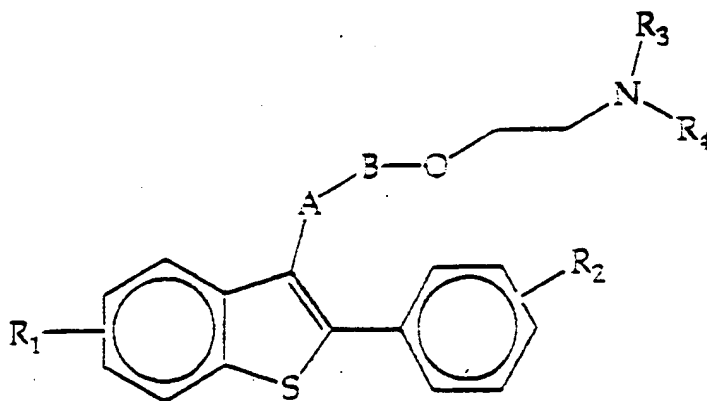
47. The method of Claim 41 wherein the two aromatic rings are both phenyl and wherein the side chain possesses a moiety selected from the group consisting of a methine, a methylene, -CO-, -O-, and -S-, an aromatic ring, and a tertiary amine function or salt thereof.

48. The method of Claim 39 wherein the selective estrogen receptor modulator is selected from the group consisting of a benzothiophene derivative, triphenylethylene derivative, indole derivative, benzopyran derivative, and centchroman derivative.

49. The method of Claim 40 wherein the selective estrogen receptor modulator is selected from the group consisting of a benzothiophene derivative, triphenylethylene derivative, indole derivative, benzopyran derivative, and centchroman derivative.

50. The method of Claim 41 wherein the selective estrogen receptor modulator is selected from the group consisting of a benzothiophene derivative, triphenylethylene derivative, indole derivative, benzopyran derivative, and centchroman derivative.

51. The method of Claim 39 wherein the selective estrogen receptor modulator is a benzothiophene derivative compound of the following formula:



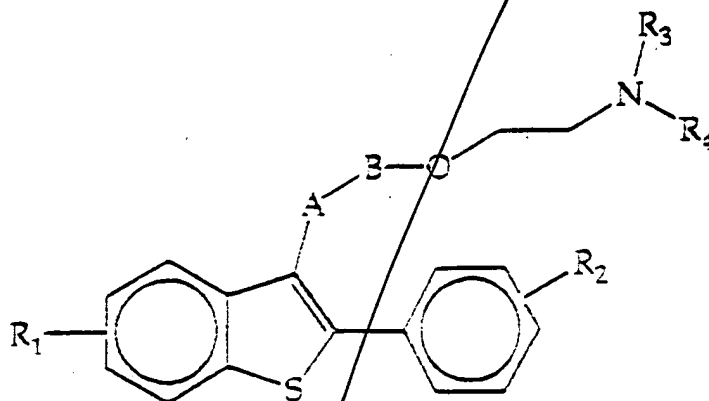
wherein R₁ and R₂ are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl;

wherein R₃ and R₄ are either independently selected from the group consisting of: C1-C4 alkyl, or wherein R₃, R₄ and the nitrogen to which they are bound, together are any structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino and morpholino;

wherein A is selected from the group consisting of -CO-, -CHOH, and -CH₂-;

wherein B is selected from the group consisting of phenylene, pyridylidene, and -cycloC₄H₂N₂-.

52. The method of Claim 40 wherein the selective estrogen receptor modulator is a benzothiophene derivative compound of the following formula:



FEB 10 2000

TECH CENTER 1600/2900

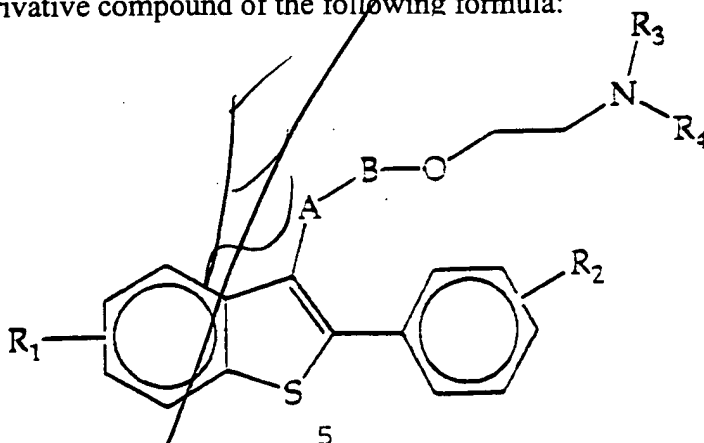
wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl;

wherein R_3 and R_4 are either independently selected from the group consisting of: C1-C4 alkyl, or wherein R_3 , R_4 and the nitrogen to which they are bound, together are any structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino and morpholino;

wherein A is selected from the group consisting of -CO-, -CHOH, and -CH₂-;

wherein B is selected from the group consisting of phenylene, pyridylidene, and -cycloC₄H₂N₂-;

53. The method of Claim 41 wherein the selective estrogen receptor modulator is a benzothiophene derivative compound of the following formula:



wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl;

wherein R_3 and R_4 are either independently selected from the group consisting of: C1-C4 alkyl, or wherein R_3 , R_4 and the nitrogen to which they are bound, together are any structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino and morpholino;

wherein A is selected from the group consisting of -CO-, -CHOH, and -CH₂-;

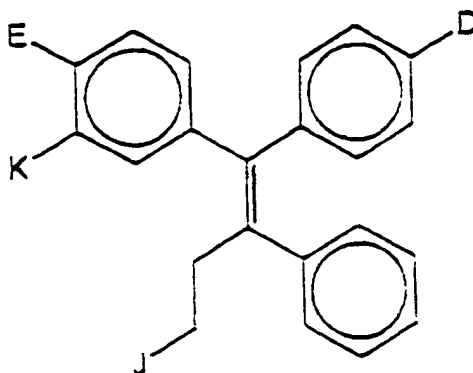
wherein B is selected from the group consisting of phenylene, pyridylidene, and -cycloC₄H₂N₂-.

54. The method of Claim 51 wherein the selective estrogen receptor modulator is selected from the group consisting of Raloxifene, LY 353381 and LY 335563.

55. The method of Claim 52 wherein the selective estrogen receptor modulator is selected from the group consisting of Raloxifene, LY 353381 and LY 335563.

56. The method of Claim 53 wherein the selective estrogen receptor modulator is selected from the group consisting of Raloxifene, LY 353381 and LY 335563.

57. The method of Claim 39 wherein the selective estrogen receptor modulator is a triphenylethylene derivative compound of the following formula:



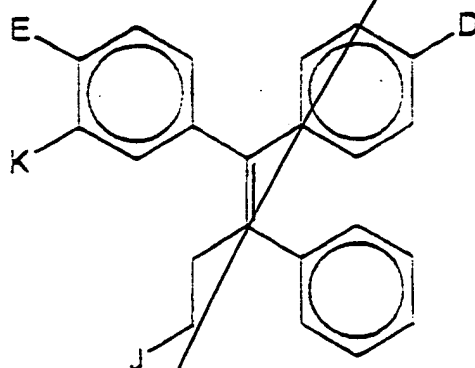
wherein D is -OCH₂CH₂N(R_3) R_4 or -CH=CH-COOH (R_3 and R_4 either being independently selected from the group consisting of C1-C4 alkyl, or R_3 , R_4 , and the nitrogen atom to which they are bound, together being a ring structure

selected from the group consisting of pyrrolidino, dimethyl-1 pyrrolidino, methyl-1pyrrolidinyl, piperidino, hexamethyleneimino and morpholino);

wherein E and K are independently hydrogen or hydroxyl;

wherein J is hydrogen or halogen.

58. The method of Claim 40 wherein the selective estrogen receptor modulator is a triphenylethylene derivative compound of the following formula:

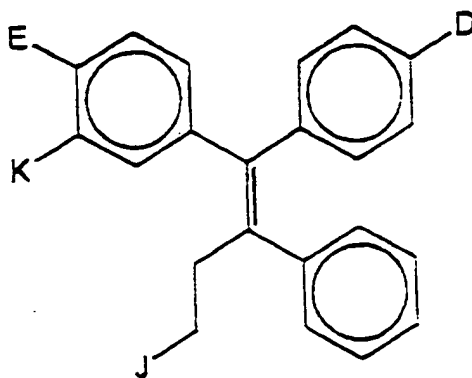


wherein D is $-OCH_2CH_2N(R_3)R_4$ or $-CH=CH-COOH$ (R_3 and R_4 either being independently selected from the group consisting of C1-C4 alkyl, or R_3 , R_4 , and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1 pyrrolidino, methyl-1pyrrolidinyl, piperidino, hexamethyleneimino and morpholino);

wherein E and K are independently hydrogen or hydroxyl;

wherein J is hydrogen or halogen.

59. The method of Claim 41 wherein the selective estrogen receptor modulator is a triphenylethylene derivative compound of the following formula:



wherein D is $-OCH_2CH_2N(R_3)R_4$ or $-CH=CH-COOH$ (R_3 and R_4 either being independently selected from the group consisting of C1-C4 alkyl, or R_3 , R_4 , and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1 pyrrolidino, methyl-1pyrrolidinyl, piperidino, hexamethyleneimino and morpholino);

wherein E and K are independently hydrogen or hydroxyl;

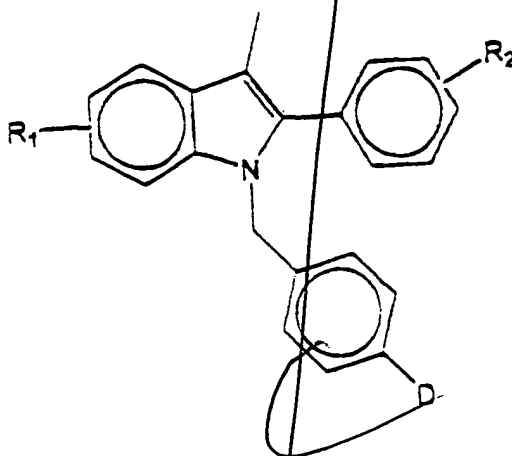
wherein J is hydrogen or halogen.

60. The method of Claim 39 wherein selective estrogen receptor modulator is Tamoxifen, OH-tamoxifen, Droloxifen, Toremifene, Iodoxifene, and GW5638.

61. The method of Claim 40 wherein selective estrogen receptor modulator is Tamoxifen, OH-tamoxifen, Droloxifen, Toremifene, Iodoxifene, and GW5638.

62. The method of Claim 41 wherein selective estrogen receptor modulator is Tamoxifen, OH-tamoxifen, Droloxifen, Toremifene, Iodoxifene, and GW5638.

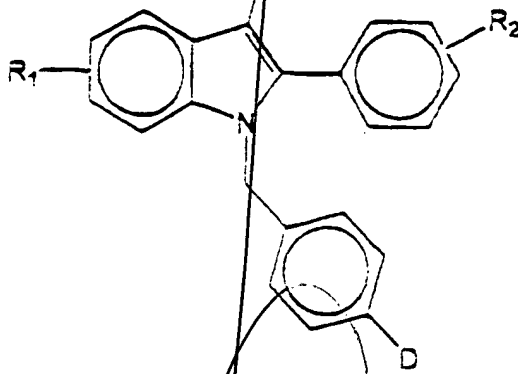
63. The method of Claim 39 wherein the selective estrogen receptor modulator is an indole derivative compound of the following formula:



wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl.

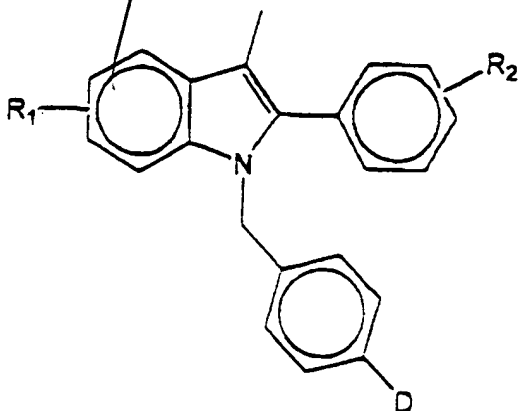
64. The method of Claim 40 wherein the selective estrogen receptor modulator is an indole derivative compound of the following formula:



wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl.

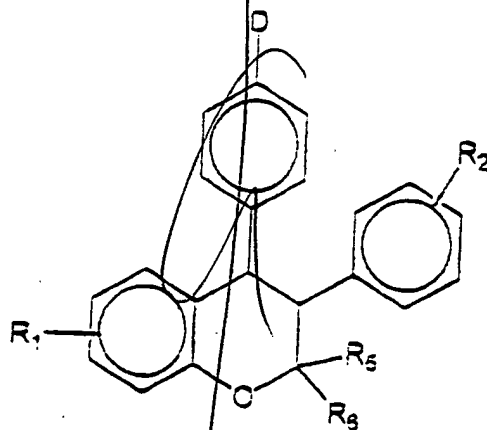
65. The method of Claim 41 wherein the selective estrogen receptor modulator is an indole derivative compound of the following formula:



wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl.

66. The method of Claim 39 wherein the selective estrogen receptor modulator is a centchroman derivative compound of the following formula:

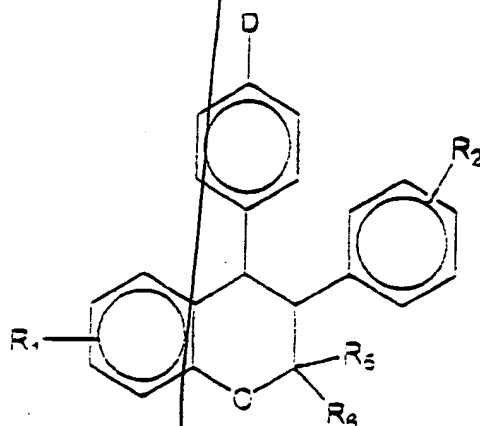


wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and moiety converted in vivo in hydroxyl;

wherein R_5 and R_6 are independently hydrogen or C_1 - C_6 alkyl;

wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

67. The method of Claim 40 wherein the selective estrogen receptor modulator is a centchroman derivative compound of the following formula:

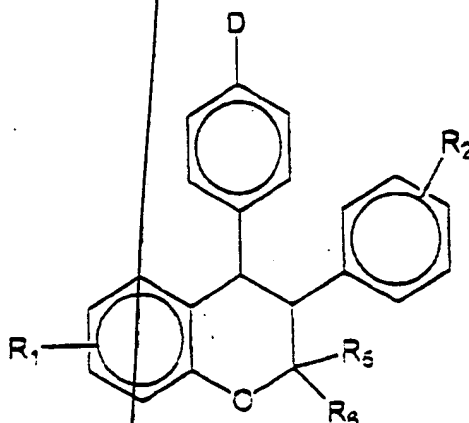


wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and moiety converted in vivo in hydroxyl;

wherein R_5 and R_6 are independently hydrogen or C_1 - C_6 alkyl;

wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

68. The method of Claim 41 wherein the selective estrogen receptor modulator is a centchroman derivative compound of the following formula:



wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and moiety converted in vivo in hydroxyl;

wherein R_5 and R_6 are independently hydrogen or C_1 - C_6 alkyl;

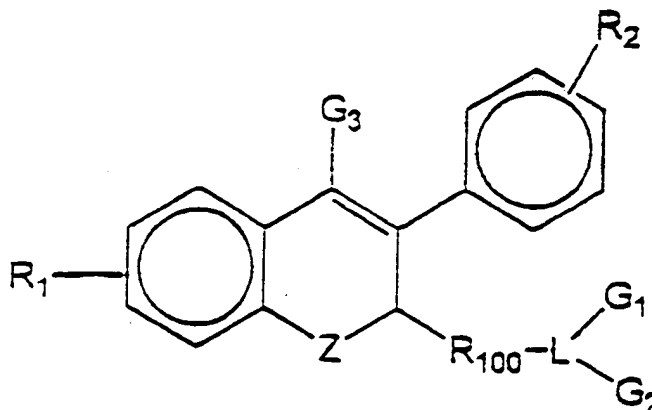
Claw
wherein D is $-\text{OCH}_2\text{CH}_2\text{N}(\text{R}_3)\text{R}_4$ (R_3 and R_4 either being independently selected from the group consisting of $\text{C}_1\text{-C}_4$ alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

69. The method of Claim 66 wherein the centchroman derivative is (3,4-trans-2,2-dimethyl-3-phenyl-4-[4-(2-(2-(pyrrolidin-1-yl)ethoxy)phenyl]-7-methoxychroman).

70. The method of Claim 67 wherein the centchroman derivative is (3,4-trans-2,2-dimethyl-3-phenyl-4-[4-(2-(2-(pyrrolidin-1-yl)ethoxy)phenyl]-7-methoxychroman).

71. The method of Claim 68 wherein the centchroman derivative is (3,4-trans-2,2-dimethyl-3-phenyl-4-[4-(2-(2-(pyrrolidin-1-yl)ethoxy)phenyl]-7-methoxychroman).

72. The method of Claim 39 wherein the selective estrogen receptor modulator has the following formula:



wherein R_1 and R_2 are independently hydrogen, hydroxyl or a moiety which is converted to hydroxyl in vivo;

wherein Z is a bivalent closing moiety;

wherein the R_{100} is a bivalent moiety which distances L from the B-ring by 4-10 intervening atoms;

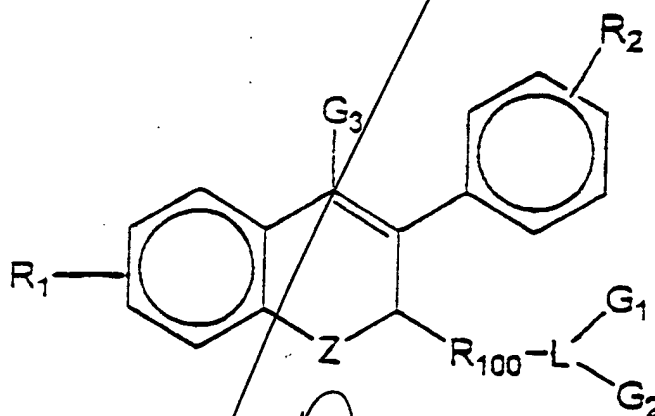
wherein L is a bivalent or trivalent polar moiety selected from the group of $-\text{SO}-$, $-\text{CON}-$, $\text{N}-<$, and $-\text{SON}<$;

wherein G_1 is selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_2 and L to form a 5-to 7-membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

wherein G_2 is either absent or selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_1 to L to form a 5-to 7-membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

wherein G_3 is selected from the group consisting of hydrogen, methyl and ethyl.

73. The method of Claim 40 wherein the selective estrogen receptor modulator has the following formula:



wherein R_1 and R_2 are independently hydrogen, hydroxyl or a moiety which is converted to hydroxyl in vivo;

wherein Z is a bivalent closing moiety;

wherein the R100 is a bivalent moiety which distances L from the B-ring by 4-10 intervening atoms;

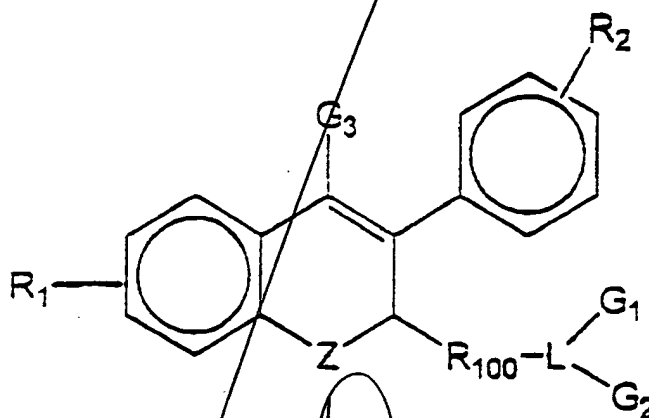
wherein L is a bivalent or trivalent polar moiety selected from the group of -SO-, -CON-, N-<, and -SON<;

wherein G_1 is selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_2 and L to form a 5-to 7-membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

wherein G_2 is either absent or selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_1 to L to form a 5-to 7- membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

wherein G_3 is selected from the group consisting of hydrogen, methyl and ethyl.

74. The method of Claim 41 wherein the selective estrogen receptor modulator has the following formula:



wherein R_1 and R_2 are independently hydrogen, hydroxyl or a moiety which is converted to hydroxyl in vivo;

wherein Z is a bivalent closing moiety;

wherein the R_{100} is a bivalent moiety which distances L from the B-ring by 4-10 intervening atoms;

wherein L is a bivalent or trivalent polar moiety selected from the group of -SO-, -CON-, N- \searrow , and -SON<;

wherein G_1 is selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_2 and L to form a 5-to 7- membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

wherein G_2 is either absent or selected from the group consisting of hydrogen, a C_1 to C_5 hydrocarbon or a bivalent moiety which joins G_1 to L to form a 5-to 7- membered heterocyclic ring, and halo or unsaturated derivatives of the foregoing.

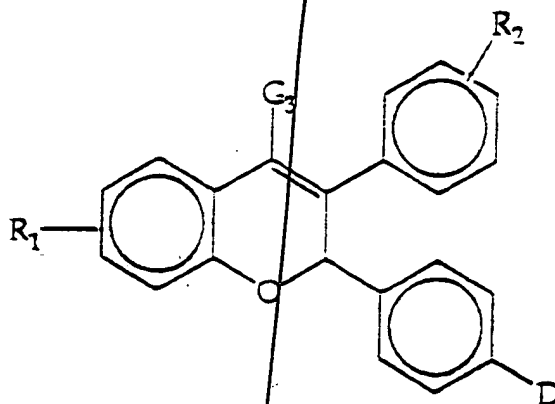
wherein G_3 is selected from the group consisting of hydrogen, methyl and ethyl.

75. The method of Claim 72, wherein Z is selected from the group consisting of -O-, -NH-, -S-, and -CH₂.

76. The method of Claim 73, wherein Z is selected from the group consisting of -O-, -NH-, -S-, and -CH₂.

77. The method of Claim 74, wherein Z is selected from the group consisting of -O-, -NH-, -S-, and -CH₂.

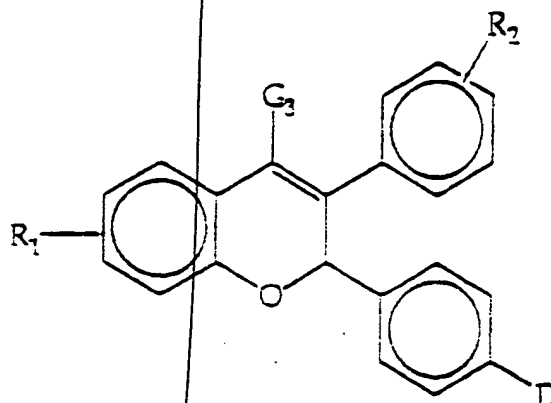
78. The method of Claim 75, wherein the compound is a benzopyran derivative of the following general structure:



wherein D is -OCH₂CH₂N(R_3)(R_4) (R_3 and R_4 either being independently selected from the group consisting of C₁-C₄ alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl.

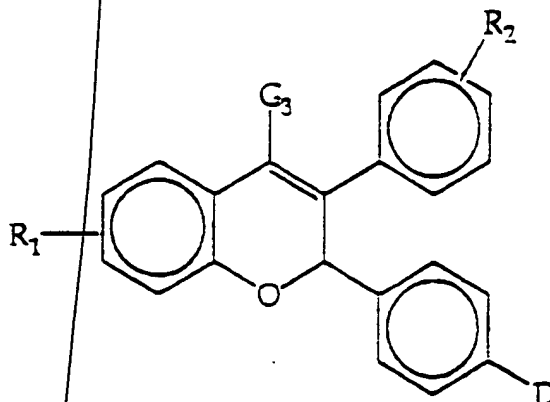
79. The method of Claim 76, wherein the compound is a benzopyran derivative of the following general structure:



wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted in vivo in hydroxyl.

80. The method of Claim 77, wherein the compound is a benzopyran derivative of the following general structure:

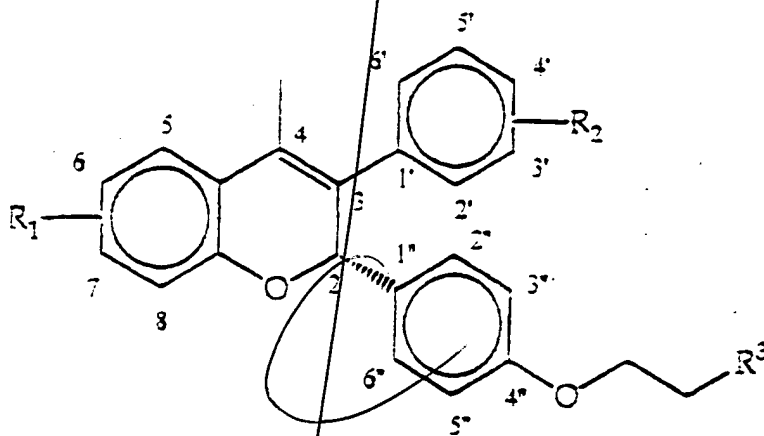


wherein D is $-OCH_2CH_2N(R_3)R_4$ (R_3 and R_4 either being independently selected from the group consisting of C_1 - C_4 alkyl, or R_3 , R_4 and the nitrogen atom

to which they are bound, together being a ring structure selected from the group consisting of pyrrolidino, dimethyl-1-pyrrolidino, methyl-1-pyrrolidinyl, piperidino, hexamethyleneimino, morpholino, ring).

wherein R_1 and R_2 are independently selected from the group consisting of: hydrogen, hydroxyl, and a moiety converted *in vivo* in hydroxyl.

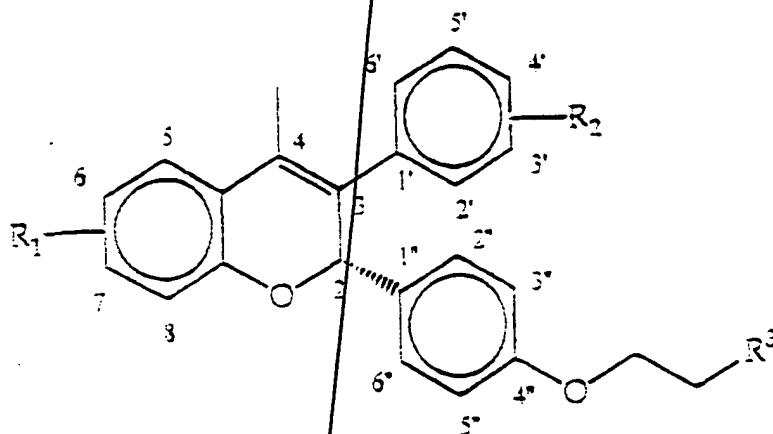
81. The method of Claim 78, wherein the benzopyran derivative is an optically active compound having an absolute configuration S on carbon 2 or pharmaceutically acceptable salt thereof, said compound having the molecular structure:



wherein R_1 and R_2 are independently selected from the group consisting of hydroxyl and an moiety convertible *in vivo* to hydroxyl;

wherein R^3 is a species selected from the group consisting of saturated, unsaturated or substituted pyrrolidinyl, saturated, unsaturated or substituted piperidino, saturated, unsaturated or substituted piperidinyl, saturated, unsaturated or substituted morpholino, nitrogen-containing cyclic moiety, nitrogen-containing polycyclic moiety, and $NRaRb$ (Ra and Rb being independently hydrogen, straight or branched C_1 - C_6 alkyl, straight or branched C_2 - C_6 alkenyl, and straight or branched C_2 - C_6 alkynyl).

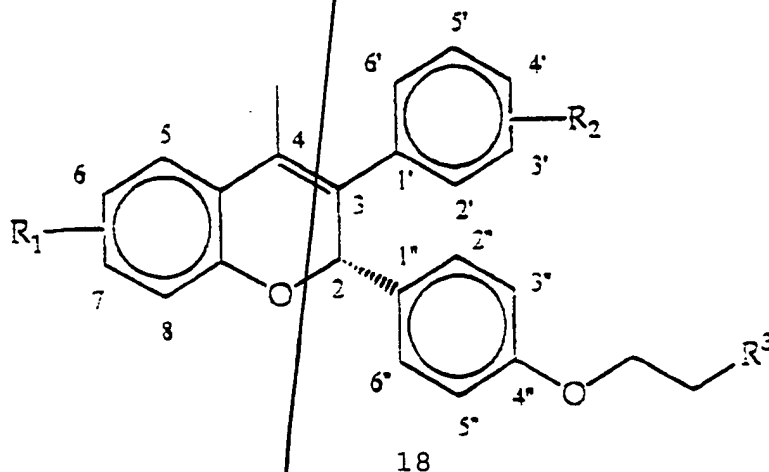
82. The method of Claim 79, wherein the benzopyran derivative is an optically active compound having an absolute configuration S on carbon 2 or pharmaceutically acceptable salt thereof, said compound having the molecular structure:



wherein R₁ and R₂ are independently selected from the group consisting of hydroxyl and an moiety convertible *in vivo* to hydroxyl;

wherein R₃ is a species selected from the group consisting of saturated, unsaturated or substituted pyrrolidinyl, saturated, unsaturated or substituted piperidino, saturated, unsaturated or substituted piperidinyl, saturated, unsaturated or substituted morpholino, nitrogen-containing cyclic moiety, nitrogen-containing polycyclic moiety, and NR_aR_b (R_a and R_b being independently hydrogen, straight or branched C₁-C₆ alkyl, straight or branched C₂-C₆ alkenyl, and straight or branched C₂-C₆ alkynyl).

83. The method of Claim 80, wherein the benzopyran derivative is an optically active compound having an absolute configuration S on carbon 2 or pharmaceutically acceptable salt thereof, said compound having the molecular structure:



wherein R₁ and R₂ are independently selected from the group consisting of hydroxyl and an moiety convertible *in vivo* to hydroxyl;

C2
Wt

wherein R³ is a species selected from the group consisting of saturated, unsaturated or substituted pyrrolidinyl, saturated, unsaturated or substituted piperidino, saturated, unsaturated or substituted piperidinyl, saturated, unsaturated or substituted morpholino, nitrogen-containing cyclic moiety, nitrogen-containing polycyclic moiety, and NRaRb (Ra and Rb being independently hydrogen, straight or branched C₁-C₆ alkyl, straight or branched C₂-C₆ alkenyl, and straight or branched C₂-C₆ alkynyl).

Sub 7

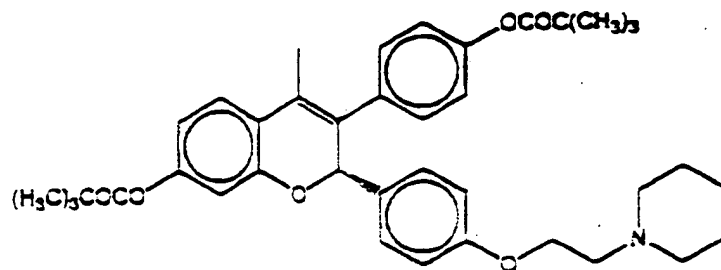
~~84. The method of Claim 81 wherein said compound or salt substantially lacks (2R)-enantiomer.~~

85. The method of Claim 82 wherein said compound or salt substantially lacks (2R)-enantiomer.

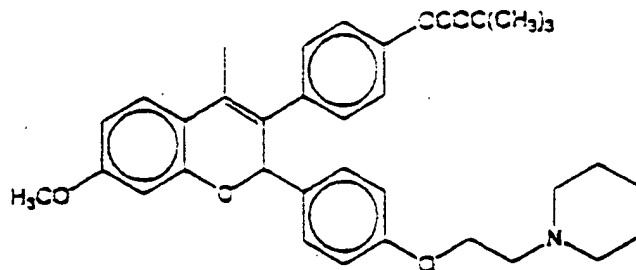
86. The method of Claim 83 wherein said compound or salt substantially lacks (2R)-enantiomer.

87. The method of Claim 78 where said selective estrogen receptor modulator is selected from the group consisting of:

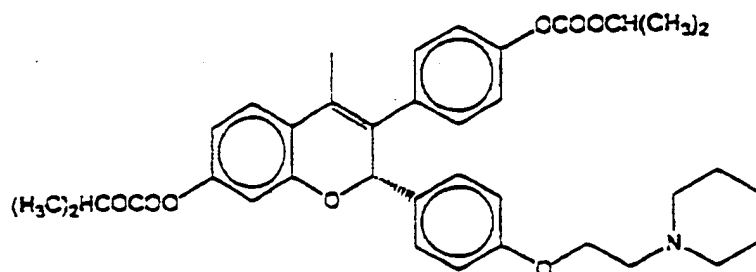
EM-800



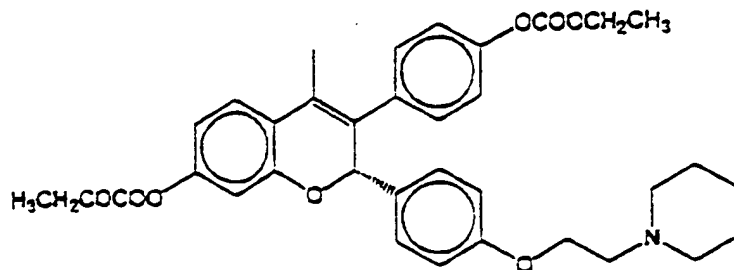
EM-01520



EM-01533

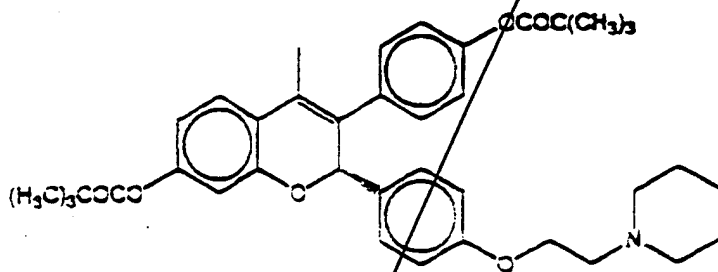


EM-01518

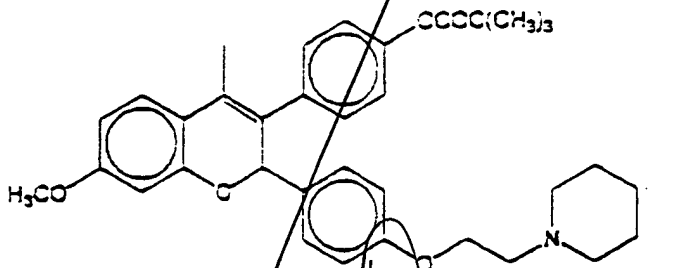


88. The method of Claim 79 where said selective estrogen receptor modulator is selected from the group consisting of:

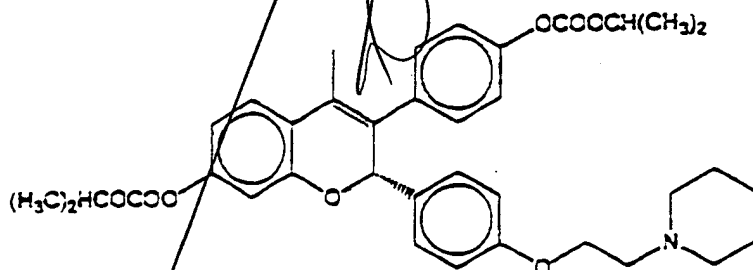
EM-800



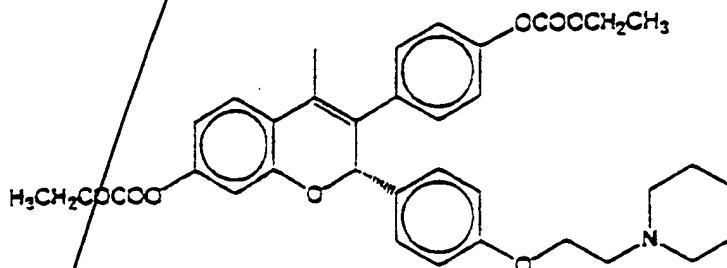
EM-01520



EM-01533

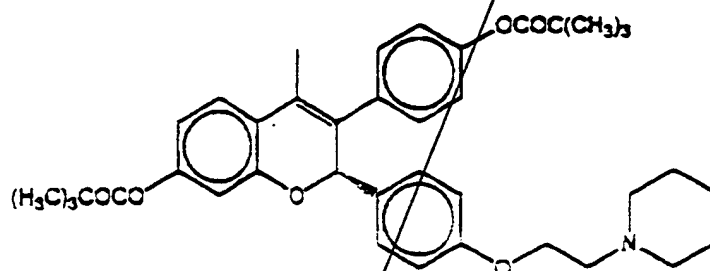


EM-01518

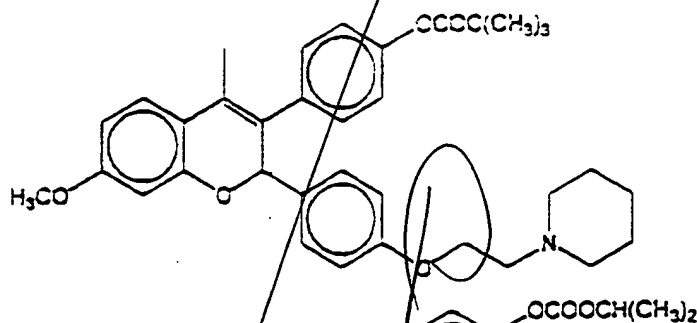


89. The method of Claim 80 where said selective estrogen receptor modulator is selected from the group consisting of:

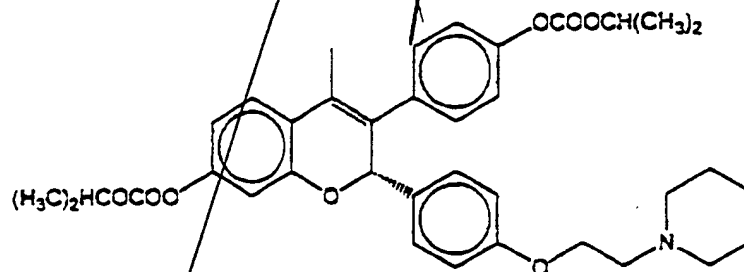
EM-800



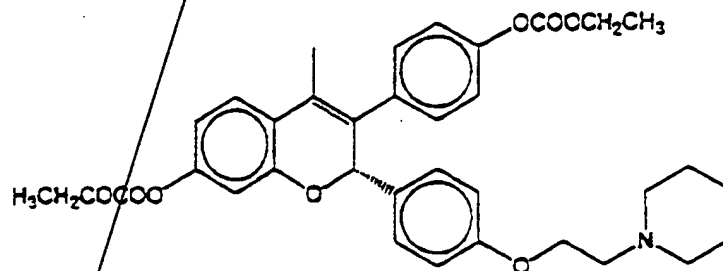
EM-01520



EM-01533



EM-01518



90. The method of Claim 84 wherein the benzopyran derivative is a salt of an acid selected from the group consisting of acetic acid, adipic acid, benzenesulfonic acid, benzoic acid, camphorsulfonic acid, citric acid, fumaric acid, hydroiodic acid, hydrobromic acid, hydrochloric acid, hydrochlorothiazide acid, hydroxy-naphthoic acid, lactic acid, maleic acid, methanesulfonic acid, methylsulfuric acid, 1,5-naphthalenedisulfonic acid, nitric acid, palmitic acid, pivalic acid, phosphoric acid, propionic acid, succinic acid, sulfuric acid, tartaric acid, terephthalic acid, p-toluenesulfonic acid, and valeric acid.

CB
91. The method of Claim 85 wherein the benzopyran derivative is a salt of an acid selected from the group consisting of acetic acid, adipic acid, benzenesulfonic acid, benzoic acid, camphorsulfonic acid, citric acid, fumaric acid, hydroiodic acid, hydrobromic acid, hydrochloric acid, hydrochlorothiazide acid, hydroxy-naphthoic acid, lactic acid, maleic acid, methanesulfonic acid, methylsulfuric acid, 1,5-naphthalenedisulfonic acid, nitric acid, palmitic acid, pivalic acid, phosphoric acid, propionic acid, succinic acid, sulfuric acid, tartaric acid, terephthalic acid, p-toluenesulfonic acid, and valeric acid.

92. The method of Claim 86 wherein the benzopyran derivative is a salt of an acid selected from the group consisting of acetic acid, adipic acid, benzenesulfonic acid, benzoic acid, camphorsulfonic acid, citric acid, fumaric acid, hydroiodic acid, hydrobromic acid, hydrochloric acid, hydrochlorothiazide acid, hydroxy-naphthoic acid, lactic acid, maleic acid, methanesulfonic acid, methylsulfuric acid, 1,5-naphthalenedisulfonic acid, nitric acid, palmitic acid, pivalic acid, phosphoric acid, propionic acid, succinic acid, sulfuric acid, tartaric acid, terephthalic acid, p-toluenesulfonic acid, and valeric acid.

93. The method of Claim 90 wherein the acid is hydrochloric acid.

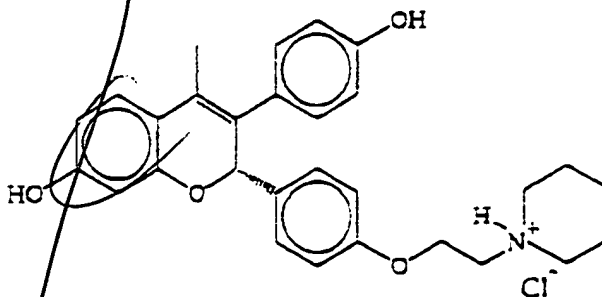
94. The method of Claim 91 wherein the acid is hydrochloric acid.

95. The method of Claim 92 wherein the acid is hydrochloric acid.

96. The method of Claim 2 wherein said selective estrogen receptor modulator

is:

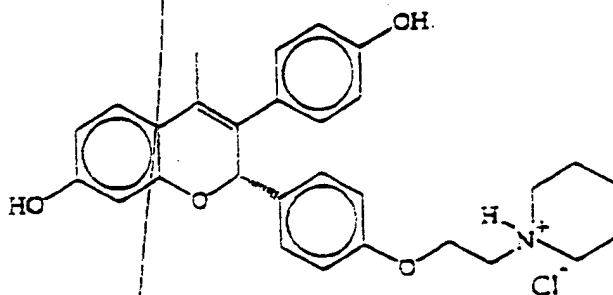
EM-1538



and an amount of a sex steroid precursor selected from the group consisting of dehydroepiandrosterone, dehydroepiandrosterone sulfate, androst-5-ene3 β ,17 β -diol.

97. The method of Claim 3 wherein said selective estrogen receptor modulator is:

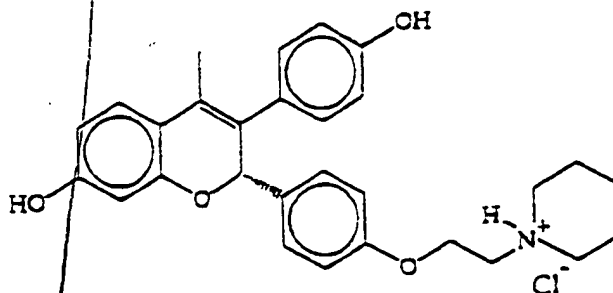
EM-1538



CH
and an amount of a sex steroid precursor selected from the group consisting of dehydroepiandrosterone, dehydroepiandrosterone sulfate, androst-5-ene3 β ,17 β -diol.

98. The method of Claim 4 wherein said selective estrogen receptor modulator is:

EM-1538



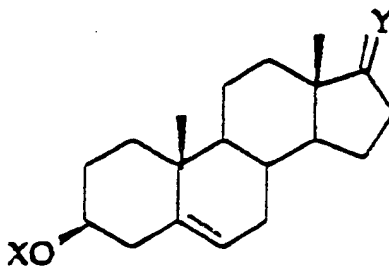
and an amount of a sex steroid precursor selected from the group consisting of dehydroepiandrosterone, dehydroepiandrosterone sulfate, androst-5-ene3 β ,17 β -diol.

99. The method of Claim 2 wherein the sex steroid precursor is dehydroepiandrosterone.

100. The method of Claim 3 wherein the sex steroid precursor is dehydroepiandrosterone.

101. The method of Claim 4 wherein the sex steroid precursor is dehydroepiandrosterone.

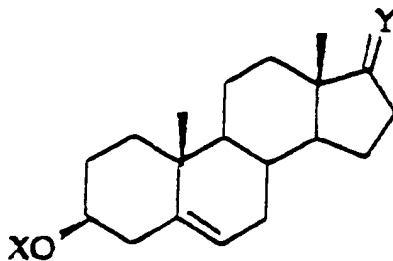
102. The method of Claim 2 wherein the compound converted *in vivo* to a sex steroid precursor has the general formula:



wherein X is selected from the group consisting of H-, ROC-, RCO₂CHRa- and RbSO₂ (R being selected from the group consisting of hydrogen, straight- or branched-(C₁-C₁₈) alkyl, straight-or branched-(C₂-C₁₈) alkenyl, straight- or branched-(C₂-C₁₈) alkynyl, aryl, furyl, straight-or branched-(C₁-C₁₈) alkoxy, straight- or branched-(C₂-C₁₈) alkenyloxy, straight- or branched-(C₂-C₁₈) alkynyloxy, aryloxy, furyloxy, and halogeno or carboxyl analogs of the foregoing; Ra being hydrogen or (C₁-C₆) alkyl; and Rb being selected from the group consisting of hydroxyl (or salts thereof), methyl, phenyl and p-toluy);

wherein Y is carbonyl oxygen or Y represent a β-OX(X having the same meaning as above) and α-H.

103. The method of Claim 3 wherein the compound converted *in vivo* to a sex steroid precursor has the general formula:



wherein X is selected from the group consisting of H-, ROC-, RCO₂CHRa- and RbSO₂ (R being selected from the group consisting of hydrogen, straight- or branched-(C₁-C₁₈) alkyl, straight- or branched-(C₂-C₁₈) alkenyl, straight- or branched-(C₂-C₁₈) alkynyl, aryl, furyl, straight- or branched-(C₁-C₁₈) alkoxy, straight- or branched-(C₂-C₁₈) alkenyloxy, straight- or branched-(C₂-C₁₈) alkynyloxy, aryloxy, furyloxy, and halogeno or carboxyl analogs of the foregoing; Ra being hydrogen or (C₁-C₆) alkyl; and Rb being selected from the group consisting of hydroxyl (or salts thereof), methyl, phenyl and p-toluy);

wherein Y is carbonyl oxygen or Y represent a β-OX(X having the same meaning as above) and α-H.

104. The method of Claim 4 wherein the compound converted *in vivo* to a sex steroid precursor has the general formula:

